

WHAT IS CLAIMED IS:

1. A firewall system for preventing non-requested packets coming from a public network from reaching network elements connected thereto, said firewall system comprising:
- 5 a front-end server having internal and external interfaces; said front-end server external interface being attached to the public network; said front-end server being configured to drop non-requested incoming packets from the public network; said non-requested packets
- 10 including signed packets and unsigned packets; and
- a back-end server having internal and external interfaces; said back-end internal interface being attached to the network elements and to said front end internal interface via said back-end external interface; said back-end server being so configured as to gather packets
- 15 requested by the network elements from the public network, and signed packets from the front-end server; said back-end server being configured so as to prevent leaks from the network elements.
2. A firewall system as recited in claim 1, wherein at least
- 20 one of said front-end and back-end servers is configured to implement IP filtering.
3. A firewall system as recited in claim 2, wherein said front-end and back-end servers implement IP filtering according to the
- 25 same rules.

4. A firewall system as recited in claim 1, wherein said back-end server is configured to capture at least one request from one of the network elements and to analyse said request for legitimacy before passing it to the public network.

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5. A firewall system as recited in claim 1, wherein said back-end server is configured to detect a transfer of data from the network elements to the public network.

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6. A firewall system as recited in claim 1, wherein at least one of said back-end internal and external interfaces and front-end internal and external interfaces is in the form of an ethernet card.

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7. A firewall system as recited in claim 1, wherein said front-end server is configured with a first OS (Operating System) and said back-end server is configured with second OS.

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8. A firewall system as recited in claim 7, wherein said first and second OS are different.

9. A firewall system as recited in claim 1, wherein said back-end server includes an application gateway.

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10. A firewall system as recited in claim 1, wherein said back-end server includes a proxy service.

11. A firewall system as recited in claim 1, wherein said front-end server is so configured as to provide NAT (Network Address Translation).

5 12. A firewall system as recited in claim 11, wherein said NAT is so implemented as to not allow DNS (Domain Name System) to pass.

10 13. A firewall system as recited in claim 1, wherein said front-end server includes a third interface.

15 14. A firewall system as recited in claim 13, further comprising at least one of a DNS server, a web server, an email server and a time server connected to said third interface of the front-end server and wherein said third interface is configured so as to provide a DMZ (DiMilitarized Zone) for said at least one of a DNS server, a web server, an email server and a time server.

20 15. A firewall system as recited in claim 14, wherein said front-end server is configured to examine request sent to one of said at least one of DNS, web, email and time servers for potentially malicious commands.

25 16. A firewall system as recited in claim 13, further comprising a push mail server connected to said third interface of the front-end server and wherein said third interface is configured so as to provide a DMZ for said push mail server.

17. A firewall system as recited in claim 16, further comprising an internal email server connected to said internal interface of said back-end server; wherein said back-end server is configured to
5 transfer email from said push mail server to said internal email server; whereby no email is allowed to pass through said front-end server directly to said back-end server.

18. A firewall system as recited in claim 16, wherein said
10 push mail server is being configured to verify email for malicious content.

19. A firewall system as recited in claim 18, wherein said push mail server is configured to remove active content form emails.

15 20. A firewall system as recited in claim 18, wherein said push mail server is configured to scan emails for viruses.

21. A firewall system as recited in claim 17, further comprising an internal site firewall attached to said internal interface of
20 said back-end server; said internal mail server being attached to said internal site firewall.

22. A firewall system as recited in claim 21, further comprising a DNS server attached to said internal site firewall.
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23. A firewall system as recited in claim 21, further comprising a web server attached to said internal site firewall.

24. A firewall system as recited in claim 1, wherein said front-end server is attached to the public network via a router.

- 5 25. A firewall system as recited in claim 1, wherein said public network is the Internet.

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